

ABSTRACT

[0049] A system method and apparatus for separating and transporting a collection of stacked objects from a stack. A depalletizing apparatus includes a suction device assembly, a probing tongue, a lifting blade, and an optional compression arm. The suction device assembly applies a suction force to the side of the stacked objects and lifts a portion of the stacked objects thereby reducing the weight on the edge of the stack. A probing tongue inserted at or below the suction device assembly into the stack aids the insertion of a lifting blade into the stack. A compression arm may be utilized to provide a downward force on the stacked objects to aid in providing stability during movement of the collection by the lifting blade.